

<b>SANYO</b>	No.2963	<b>2SC4293</b>
NPN Triple Diffused Planar Silicon Transistor Very High-Definition Color Display Horizontal Deflection Output Applications		

**Features**

- High speed ( $t_f = 300\text{ns}$  max)
- High breakdown voltage ( $V_{CB0} = 1500\text{V}$ )
- High reliability (adoption of HVP process)
- Adoption of MBIT process
- On-chip damper diode

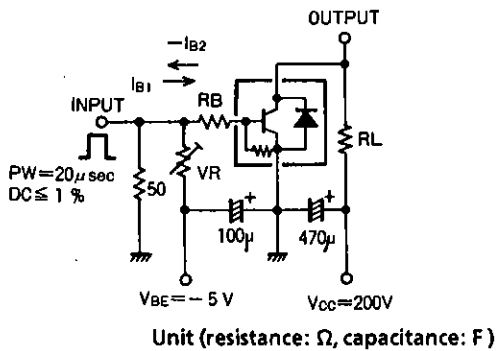
**Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$**

Collector to Base Voltage	$V_{CB0}$	1500		V
Collector to Emitter Voltage	$V_{CEO}$	800		V
Emitter to Base Voltage	$V_{EBO}$	7		V
Collector Current	$I_C$	5		A
Peak Collector Current	$i_{cp}$	16		A
Collector Dissipation	$P_C$	3.0		W
$T_c = 25^\circ\text{C}$				
Junction Temperature	$T_j$	150		$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150		$^\circ\text{C}$

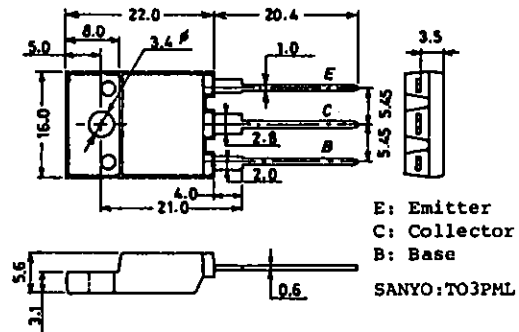
**Electrical Characteristics at  $T_a = 25^\circ\text{C}$**

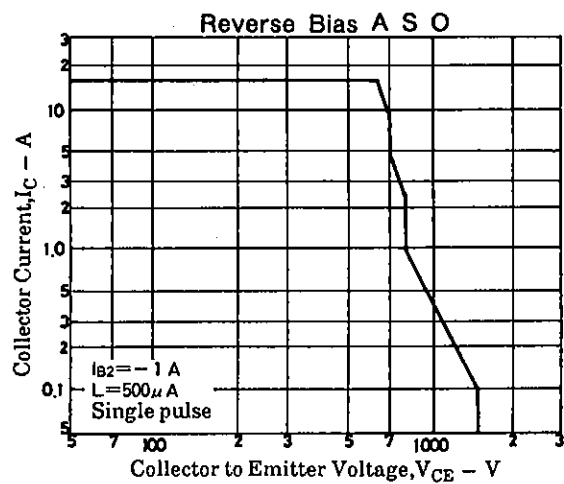
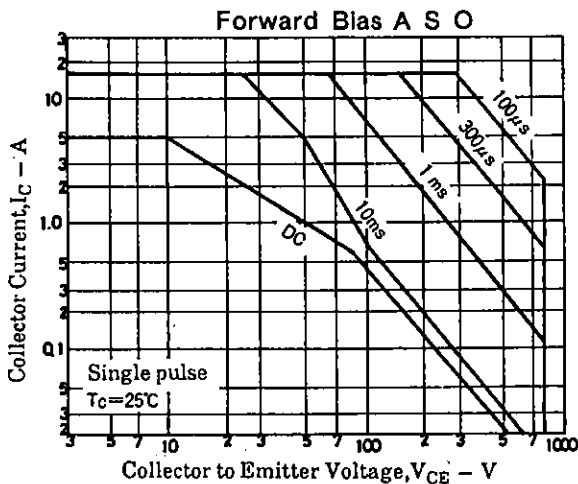
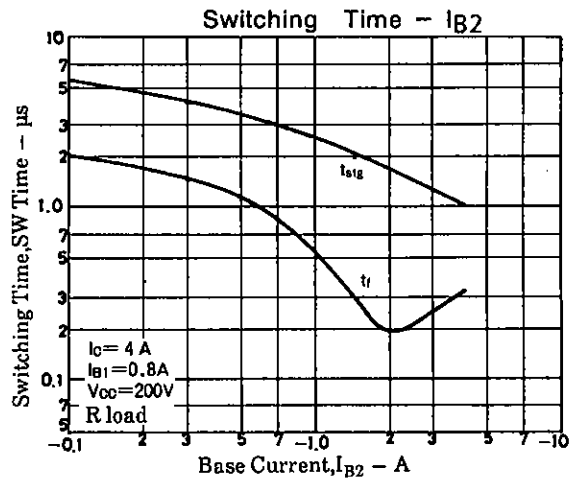
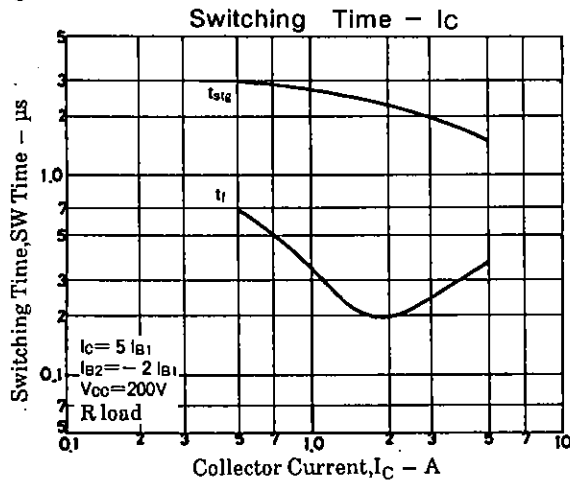
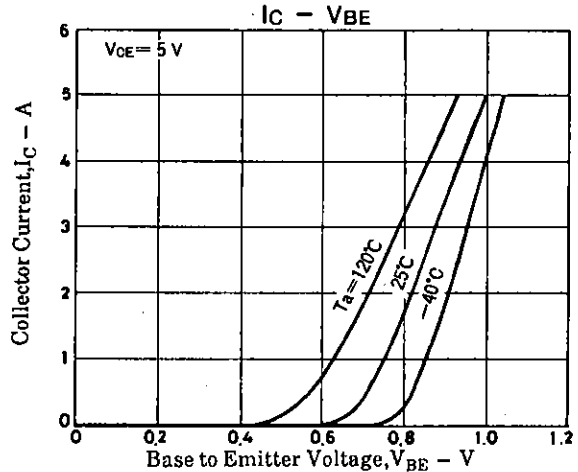
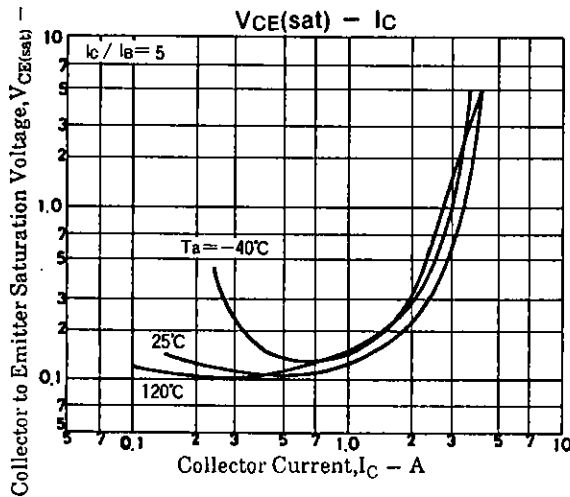
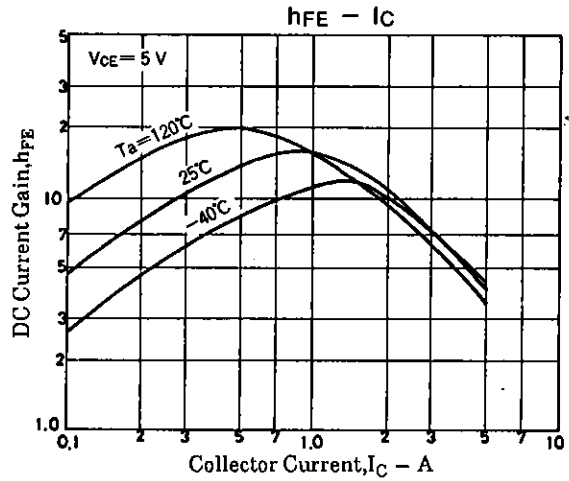
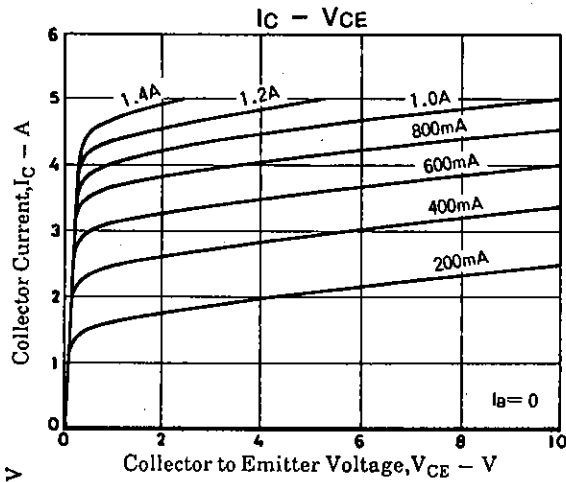
			min	typ	max	
Collector Cutoff Current	$I_{CES}$	$V_{CE} = 1500\text{V}$			1	mA
Collector Cutoff Current	$I_{CBO}$	$V_{EB} = 800\text{V}$			10	$\mu\text{A}$
Collector Sustain Voltage	$V_{CEO}(\text{SUS})$	$I_C = 100\text{mA}, I_B = 0$	800			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 4\text{V}$	40		130	mA
C-E Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = 4\text{A}, I_B = 1\text{A}$			5	V
B-E Saturation Voltage	$V_{BE}(\text{sat})$	$I_C = 4\text{A}, I_B = 1\text{A}$			1.5	V
DC Current Gain	$h_{FE}(1)$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	8			
	$h_{FE}(2)$	$V_{CE} = 5\text{V}, I_C = 4\text{A}$	4		6	
Diode Forward Voltage	$V_F$	$I_{EC} = 5\text{A}$			2.0	V
Storage Time	$t_{stg}$	$V_{CC} = 200\text{V}, I_C = 4\text{A},$ $I_{B1} = 0.8\text{A}, I_{B2} = -1.6\text{A}$			3.0	$\mu\text{s}$
Fall Time	$t_f$				0.3	$\mu\text{s}$

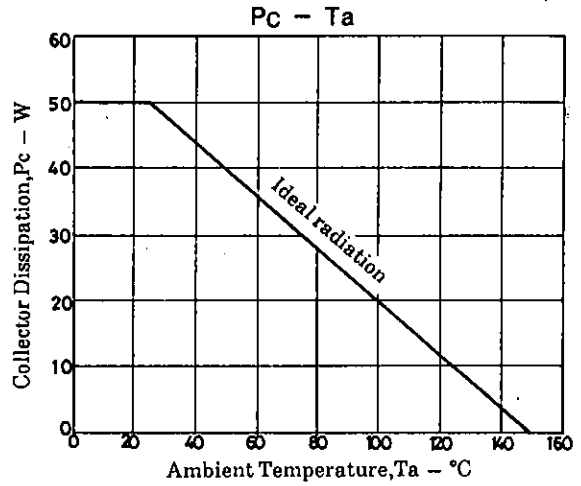
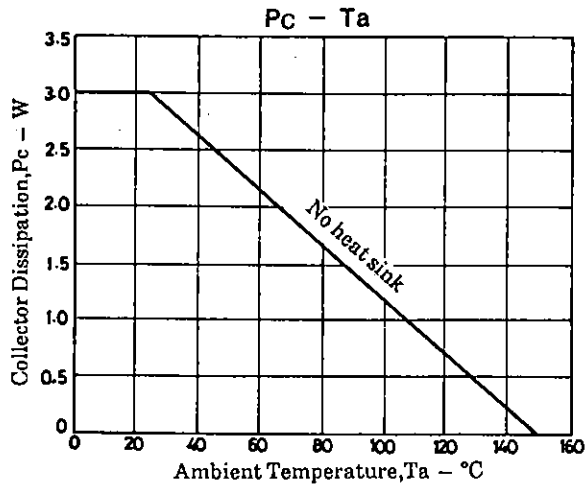
**Switching Time Test Circuit**



**Package Dimensions 2039  
(unit: mm)**







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